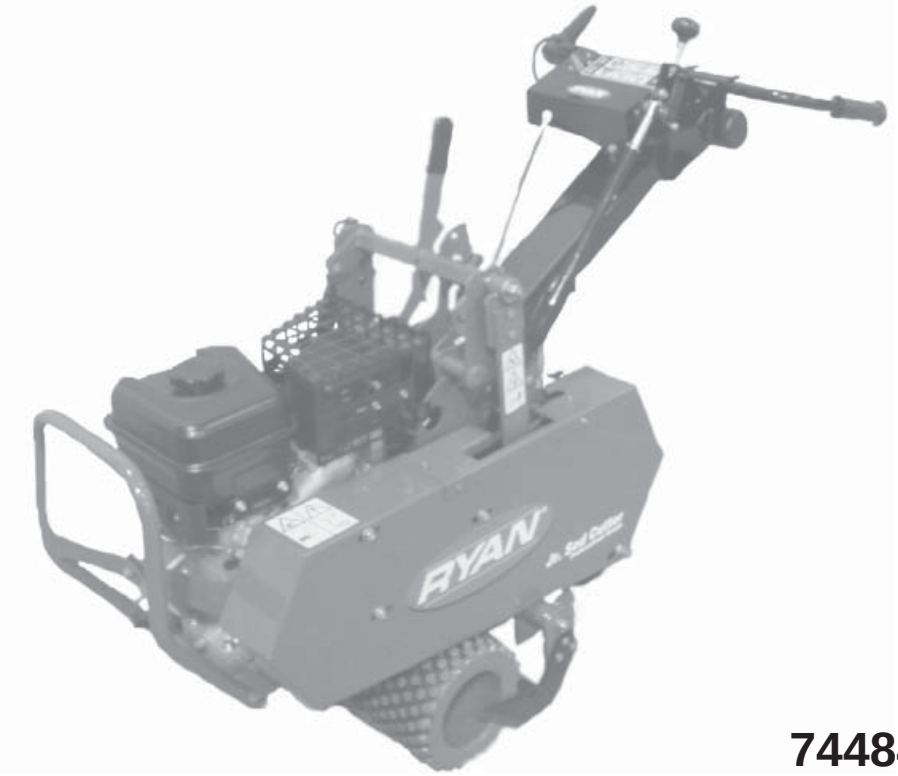
OPERATOR'S MANUAL

SELF PROPELLED WALK BEHIND SODCUTTER



744844G
JR SODCUTTER 6HP B&S 12"

744845G
JR SODCUTTER 6HP B&S 18"

744944C
JR SODCUTTER 5.5HP HONDA 12"

744945C
JR SODCUTTER 5.5HP HONDA 18"

SCHILLER GROUNDS CARE

MAN 4164644
Rev. A 01-2010
Parts Manual 4164645

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

⚠ WARNING

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

CALIFORNIA

Proposition 65 Warning

Battery posts, terminals, wiring insulation, and related accessories contain lead and lead compounds, chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. **WASH HANDS AFTER HANDLING.**

IMPORTANT MESSAGE

Thank you for purchasing this Schiller Grounds Care, Inc. product. You have purchased a world class product, one of the best designed and built anywhere.

This machine comes with an Operation and Safety Manual and Parts/Service Manual. The useful life and good service you receive from this machine depends to a large extent on how well you read and understand this manual. Treat your machine properly, lubricate and adjust it as instructed, and it will give you many years of reliable service.

Your safe use of this Schiller Grounds Care, Inc. product is one of our prime design objectives. Many safety features are built in, but we also rely on your good sense and care to achieve accident-free operation. For best protection, study the manual thoroughly. Learn the proper operation of all controls. Observe all safety precautions. Follow all instructions and warnings completely. Do not remove or defeat any safety features. Make sure those who operate this machine are as well informed and careful in its use as you are.

See a Schiller Grounds Care, Inc. dealer for any service or parts needed. Schiller Grounds Care, Inc. service ensures that you continue to receive the best results possible from Schiller Grounds Care, Inc. products. You can trust Schiller Grounds Care, Inc. replacement parts because they are manufactured with the same high precision and quality as the original parts.

Schiller Grounds Care, Inc. designs and builds its equipment to serve many years in a safe and productive manner. For longest life, use this machine only as directed in the manual, keep it in good repair and follow safety warnings and instructions. You'll always be glad you did.

Schiller Grounds Care, Inc.
One Bob Cat Lane
Johnson Creek, WI 53038-0469

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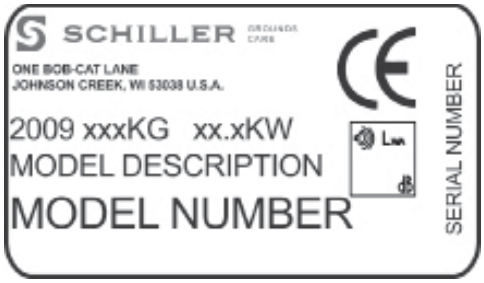
Original Language Instructions

NOTICE !!!

Unauthorized modifications may present **extreme** safety hazards to operators and bystanders and could also result in product damage.

Schiller Grounds Care, Inc. strongly warns against, rejects and disclaims any modifications, add-on accessories or product alterations that are not designed, developed, tested and approved by Schiller Grounds Care, Inc. Engineering Department. Any Schiller Grounds Care, Inc. product that is altered, modified or changed in any manner not specifically authorized after original manufacture–including the addition of "after-market" accessories or component parts not specifically approved by Schiller Grounds Care, Inc. will result in the Schiller Grounds Care, Inc. Warranty being voided.

Any and all liability for personal injury and/or property damage caused by any unauthorized modifications, add-on accessories or products not approved by Schiller Grounds Care, Inc. will be considered the responsibility of the individual(s) or company designing and/or making such changes. Schiller Grounds Care, Inc. will vigorously pursue full indemnification and costs from any party responsible for such unauthorized post-manufacture modifications and/or accessories should personal injury and/or property damage result.



This symbol means:
ATTENTION!
BECOME ALERT!

Your safety and the safety of others is involved.

Signal word definitions:

The signal words below are used to identify levels of hazard seriousness. These words appear in this manual and on the safety labels attached to Schiller Grounds Care, Inc. machines. For your safety and the safety of others, read and follow the information given with these signal words and/or the symbol shown above.

⚠DANGER

DANGER indicates a hazardous situation which, if not avoided, **WILL** result in death or serious injury.

⚠WARNING

WARNING indicates a hazardous situation which, if not avoided, **COULD** result in death or serious injury.

⚠CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **COULD** result in minor or moderate injury. It may also be used to alert against unsafe practices or property damage.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **MAY** result in property damage.

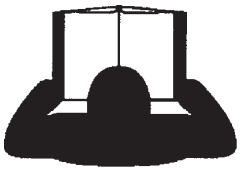
MODEL NUMBER: This number appears on sales literature, technical manuals and price lists.

SERIAL NUMBER: This number appears only on your mower. It contains the model number followed consecutively by the serial number. Use this number when ordering parts or seeking warranty information.

MACHINE PREPARATION

Operator preparation and training

Read the Operation & Safety Manual



- If an operator or mechanic cannot read English, it is the owner's responsibility to explain this material to them. If any portion of this material is unclear, contact your factory representative for clarification.
- Become familiar with the safe operation of the equipment, operator controls and safety signs. Be prepared to stop the engine quickly in an emergency. Do not operate or allow another person to operate this machine if there are any questions about safety.
- All operators and mechanics should be trained. The owner is responsible for training the users.
- Wear appropriate clothing, including safety goggles or safety glasses with side shields when operating. Wear substantial footwear. Do not operate barefoot or wearing open sandals. Long hair, loose clothing or jewelry may get tangled in moving parts.
- Wear appropriate hearing protection.
- Wear safety glasses.
- Never allow children, unskilled or improperly trained people to operate this equipment. Local regulations can restrict the age of the operator.
- Keep warning labels and this operator's manual legible and intact. Replacement labels and manuals are available from the factory.
- Do not operate machine while under the influence of drugs or alcohol, or any other condition of impairment.
- The owner/user can prevent and is responsible for accidents or injuries occurring to themselves, other people or property.

SITE PREPARATION AND CIRCUMSTANCES

- Evaluate the terrain to determine how to safely perform the job. Only use accessories and attachments approved by the manufacturer.
- Clear the area to be cut of objects such as rocks, toys, wire or other debris that may be thrown or get tangled in the sod cutter.
- Be sure the area is clear of pets and people, especially young children. Never assume they will remain where you last saw them. Stop the machine if any enter the area.
- Cut sod only in daylight or in good artificial light.

MACHINE PREPARATION

- Check operator presence interlock system. Adjust or have any problems repaired before using.
- Do not tamper with or defeat safety devices. Keep guards, shields and interlock safety devices in place and in proper working condition. They are for your protection.
- Keep all fasteners such as nuts, bolts and pins well secured.
- Visually inspect blade and blade bolts for wear or damage. Replace worn or damaged blades and bolts.
- Verify that machine and attachments, if any, are in good operating condition.
- Do not engage blade until ready to cut sod.

OPERATING SAFELY

IN GENERAL

– Use extra care when loading or unloading the machine into a trailer or truck.

– Use caution when making turns and crossing roads and sidewalks. Stop blade when not cutting sod.

– Do not run the engine in an enclosed area where dangerous carbon monoxide fumes can collect.

– Never leave a running machine unattended. Always turn off blade and stop engine when leaving the operator position. When leaving the machine be sure the wheel drive clutch is engaged.

– Use extreme caution when reversing or pulling machine towards you.

– Stop operation if someone approaches.

– Never leave a running machine unattended. Always disengage drive, and stop engine.

STARTING

– Start according to instructions in this manual or on the machine.

– Before attempting to start the engine, make sure the master clutch is disengaged.

– When starting the engine, make sure hands and feet are clear of the blade.

– Do not change engine governor settings or overspeed the engine. Operating the engine at excessive speed can increase the hazard of personal injury.

OPERATING ON SLOPES

- Slopes are a major factor in loss of control and tip over accidents that sometimes lead to severe injury or death. All slopes require extra caution.
- Before operating on slopes, evaluate the risks involved.
- Do not operate on slopes if uneasy or uncertain. Ultimate responsibility for safe operation on slopes rests with the operator.
- Do not operate on steep slopes.
- Keep all movement on slopes slow and gradual.
- Do not cut sod near drop-offs, ditches or embankments. The machine could suddenly turn over if a wheel runs over the edge or an edge caves in.
- Do not turn on slopes unless necessary, and then turn slowly and downhill when possible.
- Be sure of your footing on slopes.
- With walk behind machines, operate across slopes, not up and down.
- Avoid starting or stopping on a slope. If wheels lose traction, disengage the cutter blade and proceed straight down the slope.

INTERRUPTING OPERATION

- Before leaving the operator's position:
  - Park on level ground.
  - Disengage the master clutch.
  - Shut off the engine.
- Disengage the master clutch and wait until the blade stops moving then disengage the blade clutch:.
  - when not cutting sod;
  - for transport;
  - when crossing surfaces other than grass.
- Disengage the master clutch, stop the engine, and wait until the blade stops moving:
  - before refueling;
  - before making blade adjustment .
- Disengage the master clutch, stop the engine, and disconnect the spark plug wire(s):
  - before clearing blockages;
  - before checking, cleaning or working on the machine;
  - after striking a foreign object. Inspect the machine for damage and have repairs made before restarting;
  - if the machine begins to vibrate abnormally: shut off machine immediately. Inspect and have repairs made as needed before restarting;
  - except for repairs or adjustments as specifically noted, such as for carburetor adjustment, where the engine must be running. Keep hands and feet clear of moving parts in these circumstances.
- Allow the blade to come to a complete stop when stopping operation to clear blockages, unclog, inspect the machine, do maintenance or repair.
- Reduce the throttle setting during engine shut-down and, if the engine is provided with a shut-off valve, turn the fuel off at the conclusion of operation.

MAINTENANCE SAFETY

In general

- Maintain machine according to manufacturer's schedule and instructions for maximum safety and best results.
- Park machine on level ground.
- Never allow untrained personnel to service machine.
- Guards should only be removed by qualified maintenance technician for maintenance/service. Replace when work is complete.
- Adjust or repair only after the engine has been stopped and the blade has stopped moving.
- Disconnect spark plug wire(s) before doing any maintenance.
- Replace parts if worn, damaged or faulty. For best results, always replace with parts recommended by the manufacturer.
- Do not dismantle the machine without releasing or restraining forces which may cause parts to move suddenly.
- Provide adequate support, e.g. jack stands for lifted machine or parts if working beneath.
- Do not put hands or feet near or under rotating parts.
- Clean up spilled oil or fuel thoroughly.
- Replace faulty mufflers.
- To reduce fire hazards, keep the engine, muffler, and fuel storage area free of grass, leaves, debris buildup or grease.

Blades

The sod cutter blade is sharp and can cut. Use extra caution when handling. Remove obstructions with care. Wrap the blade or wear gloves.

- Only replace blade. Never straighten or weld.
- Keep other persons away from blades.

Fuel

- Petrol (gasoline) and diesel fuels are flammable; petrol (gasoline) vapors are explosive. Use extra care when handling.
- Store only in containers specifically designed for fuel.
- When refueling or checking fuel level:
  - Stop the engine and allow to cool;
  - Do not smoke;
  - Refuel outdoors only;
  - Use a funnel;
  - Do not overfill;
  - If fuel is spilled, do not attempt to start the engine until the spill is cleaned up and vapors have cleared.
  - Replace caps on fuel containers and tanks securely.

Sparks from static electricity can start fires or cause explosions. Flowing fuel can generate static electricity. To prevent static electricity sparks:

- Keep fuel containers electrically grounded. Do not fill containers in a vehicle or on a truck or trailer bed with a plastic liner. Fill containers on the ground away from the vehicle.
- When practical, remove petrol (gas) powered equipment from the truck or trailer and refuel it on the ground. If equipment must be refueled on the truck or trailer, refuel from a portable container rather than a dispenser nozzle.
- Keep the dispenser nozzle in contact with the rim of the fuel tank or container opening until fueling is complete. Do not use a nozzle lock-open device.

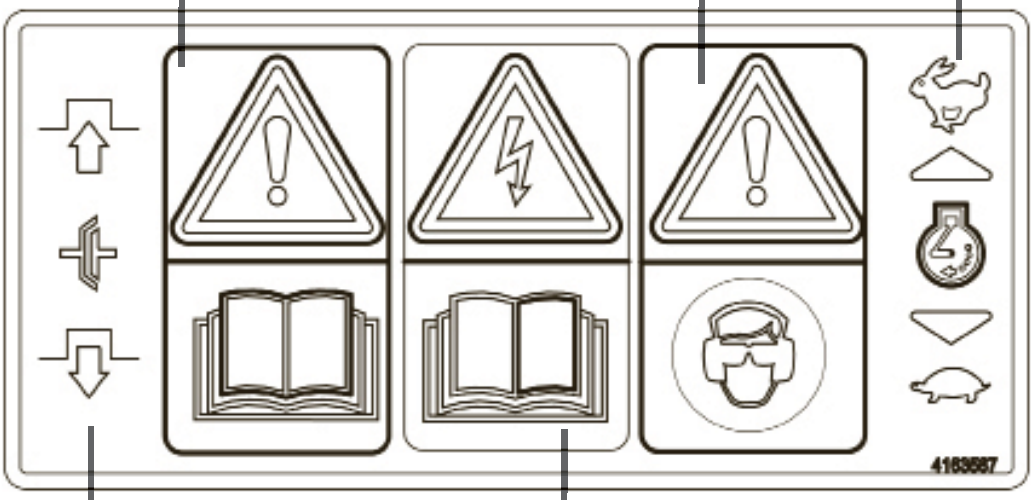
STORAGE SAFETY

- Stop the engine and allow to cool before storing.
- Drain the fuel tank outdoors only.
- Store fuel in an approved container in a cool, dry place.
- Keep the machine and fuel containers in a locked storage place to prevent tampering and to keep children from playing with them.
- Do not store the machine or fuel container near heating appliances with an open flame, such as a water heater, or an appliance with a pilot light.
- Keep petrol (gasoline) storage area free of grass, leaves and excessive grease to reduce fire hazard.
- Clean grass and debris from cutting units, drives, mufflers and engine to help prevent fires.

ATTENTION:
Read and understand Operator Manual.
Replace manual if lost or damaged.

ENGINE THROTTLE CONTROL:
Move forward to increase engine speed.
Move rearward to decrease engine speed.

ATTENTION:
Wear hearing protection and safety glasses.



MASTER CLUTCH:
Move lever forward to engage.
Move lever rearward to disengage.

UNDERGROUND UTILITY HAZARD:
Contacting underground utilities may cause leaks, explosions or electrocutions.
-Check operation area for underground utilities such as electrical, gas, and water lines.
-Do not operate where underground utilities are present.

Moving blades/blade arms cut/crush Hazard

Stay clear of blade/blade arms while operating.

Stop engine before servicing or adjusting.

ROTATING PARTS:
Entanglement / Amputation Hazard
Do not operate with cover removed.
Stop engine before servicing.

4163591

ATTENTION:
-Read Operator Manual before servicing or repairing.
-Remove spark plug wire before servicing or repairing.

524485

Rotate lever counter clockwise to engage sodcutter blade drive.
Rotate lever clockwise to disengage sodcutter blade drive.

524486

Rotate lever counter clockwise to engage wheel drive.
Rotate lever clockwise to disengage wheel drive.

MASTER CLUTCH CONTROL LEVER(A)
Engages / disengages drive belt. Applies brake to drive belt when pulled FIRMLY to rear.

THROTTLE CONTROL (B)
Controls engine speed.

ENGINE SWITCH
(Located on the engine)
Move to "ON" position to start engine. Move to "OFF" position to stop the engine.

OPERATOR PRESENCE CONTROL (C)
With master clutch control engaged, engine will stop if operator presence lever is not depressed.

BLADE DEPTH CONTROL LEVER (D)
Raises or lowers cutting blade.

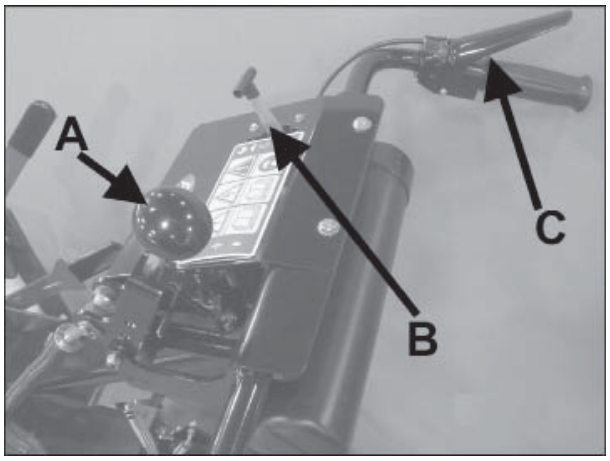
BLADE DEPTH CONTROL LOCKING LEVER (E)
Locking lever holds blade depth control in desired position.

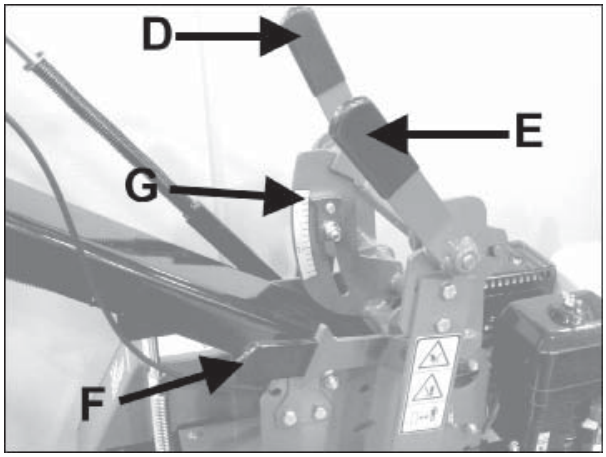
BLADE ANGLE LOCKING LEVER (F)
Locks blade angle.

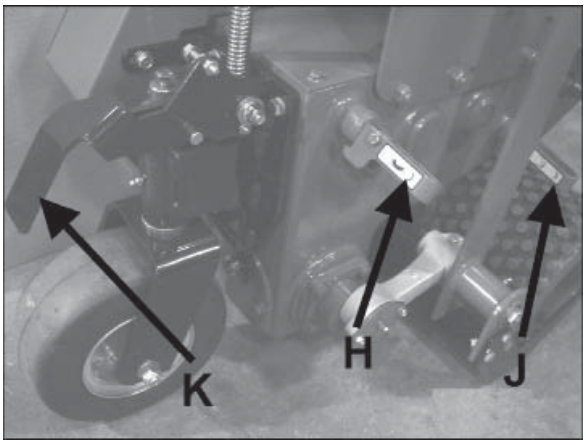
DEPTH STOP (G)
Allows resetting of blade depth to the previous cutting height.

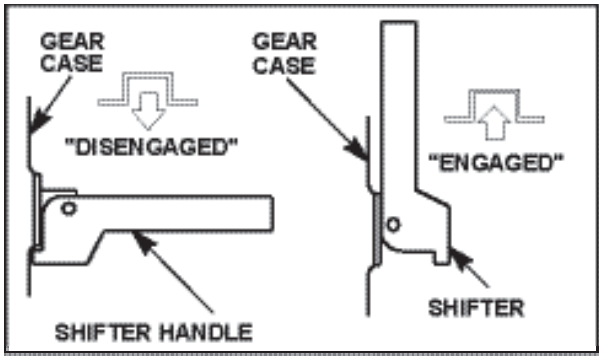
BLADE AND WHEEL SHIFTER HANDLES (H & J)
Engage and disengage blade for cutting and gears for driving Sodcutter.

CASTER WHEEL LOCKING LEVER (K)
Allows for straight cutting when locked (down) and curved cutting when unlocked (up).









PRE-OPERATION CHECK LIST
(OPERATOR'S RESPONSIBILITY)

- Review and follow all safety rules and safety decal instructions.
- Check that all safety decals are installed and in good condition. Replace if damaged.
- Check to make sure all shields and guards are properly installed and in good condition.
- Check that all hardware is properly installed and secured.
- Check to be sure engine is free of dirt and debris. Pay particular attention to the cooling fins, governor parts and muffler. Clean air intake screen. Check air cleaner; service is necessary.
- Inspect area. Remove stones or other hard objects that might cause damage.
- Check that there are no underground utilities in work area.
- Check all lubrication points and grease as instructed in manual.
- Perform a functional check of the safety interlock system each time you operate the unit. If it doesn't work, repair before using the machine.

BEFORE STARTING THE ENGINE

1. Be familiar with the controls, how each functions, and what each operates.

2.. Check engine oil level. Add oil if necessary, following the engine manufacturer's recommendations. Refer to engine manual supplied with machine.

3. Open the fuel valve.

4. Fill the fuel tank with the amount and type of fuel recommended by the engine manufacturer.

5. CHOKE: For cold starts, set the throttle lever to the half-open position and move the choke to the ON position. For warm starts set the throttle to the half-open position and the choke to the OFF position.

OPERATOR PRESENCE INTERLOCK SYSTEM

To start the engine:
- The master clutch must be disengaged.

To operate the machine:
- The operator must hold down the operator presence lever or engaging the master clutch will kill the engine.

⚠ WARNING

Petrol(Gasoline) is extremely flammable and highly explosive under certain conditions. BE SURE to install fuel cap after refueling.

Fill fuel tank with good quality, clean, unleaded regular petrol (gasoline) to the level recommended by the engine manufacturer.

TO CHECK OR ADD FUEL:

- Use a funnel to avoid spilling.
- Do it outdoors.
- Do not smoke.
- Stop the engine; allow to cool.
- Do not overfill.
- Clean up spilled fuel.

STARTING THE ENGINE

1. Move the engine switch to the "ON" position.

2. Pull the recoil starter to start the engine.

3. If the choke is ON when the engine starts, gradually back it off until the engine runs with no choke at all.

MOVING OF UNIT

To move unit without running blade:

1. Place blade shifter handle in "disengaged" position (handle will point straight out from unit) See **Figure 1**.

2. Set engine speed to slow.

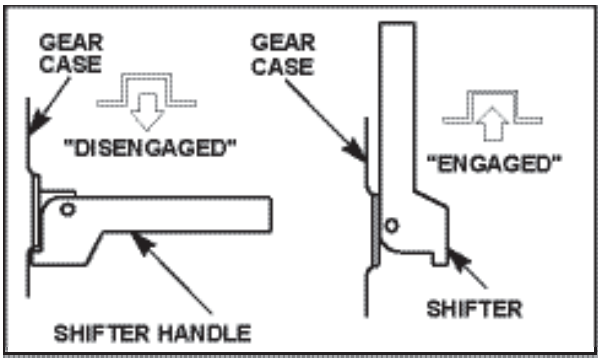
3. Engage drive shifter handle.

4. Depress operator presence control.

5. Engage master clutch control lever.

6. Adjust throttle to desired walking speed.

To move unit **without running the engine**, put drive shifter handle and clutch control lever in the "disengaged" position. Push unit to move it.



CUTTING SOD

WARNING

Underground utilities. Electrocution, explosion, service disruption risk.

Before beginning any work, check with the local authorities for underground utility location and depth. Do not operate where there is any risk of contacting underground utilities. Contacting buried utilities could result in a service outage. Contacting buried electrical wires could result in electrocution. Contacting a buried gas line could result in an explosion.

This precaution is especially important when using attachments such as the mole blade or trencher which operate at greater depths.

1. Move machine to the area where sod is to be cut. With the engine off and the master clutch disengaged, stand on the right side of the machine. Loosen the Blade Depth Control Locking Lever with your right hand, then use the handle bar to tip the machine forward and hold it with your left hand. Lower the Blade Depth Control Lever with your right hand until it hits the preset Depth Stop. Tighten the Locking Lever.

2. Start the engine, then engage the wheel drive and the blade drive with the Wheel Drive Shifter Lever and the Blade Drive Shifter Lever.

3. For straight cutting, leave the caster wheel locking lever down. For cutting irregular or curved shapes, raise the caster wheel locking lever up and forward.

4. Adjust the throttle to full speed. With the machine tipped forward, engage the Master Clutch. The machine will start moving forward and the blade drive will operate. Lower the machine into the sod and cut for a short distance.

5. Stop the machine and check the sod thickness. Adjust the Depth Stop and blade if necessary. See Adjustment section.

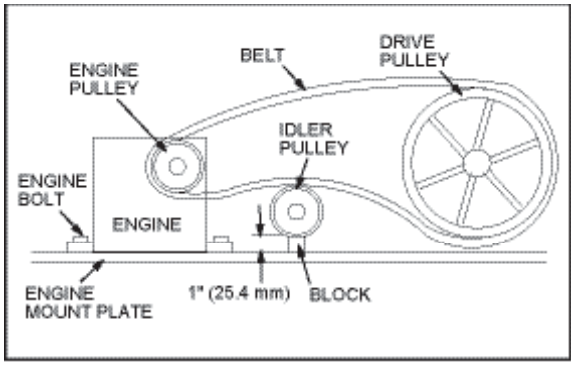
6. Continue cutting. At the end of each pass lift up on the handle to raise the blade out of the sod and turn around for the next pass.

DRIVE BELT ADJUSTMENT

Keep belt free of oil and dirt, and adjusted to proper tension at all times.

Belt tension is adjusted by loosening four (4) engine mounting bolts and shifting engine on the base.

Belt tension is correct when the distance between the roll pin and sleeve on the master clutch rod is 1" to 1 1/4" (25-30mm)when the master clutch is engaged.



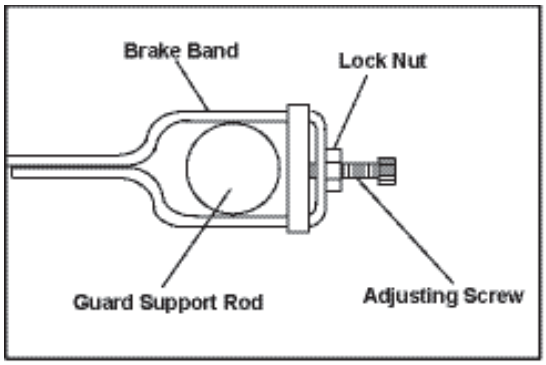
BRAKE BAND ADJUSTMENT

When adjusted properly:
- With the Master Clutch Control Lever engaged, the brake band is not braking the large drive pulley.
- When the Master Clutch Control Lever is disengaged, there will be some braking occurring on the large drive pulley.
- When the Master Clutch Control Lever is disengaged, and pulled back firmly, the brake will fully stop the large drive pulley.

1. For less braking, loosen the locknut, unscrew the adjusting screw, then retighten the locknut.

2. For more braking, loosen the locknut, turn the adjusting screw in, then retighten the locknut.

Start the machine, and check for proper operation. Readjust if necessary. IF the engine kills when engaging the Master clutch Control Lever, the brake may be set too tight.



ADJUSTING DEPTH OF CUT

3/4" (20mm) is a good general starting depth of cut. Depth of cut can be varied from there depending on conditions and what you are trying to accomplish.

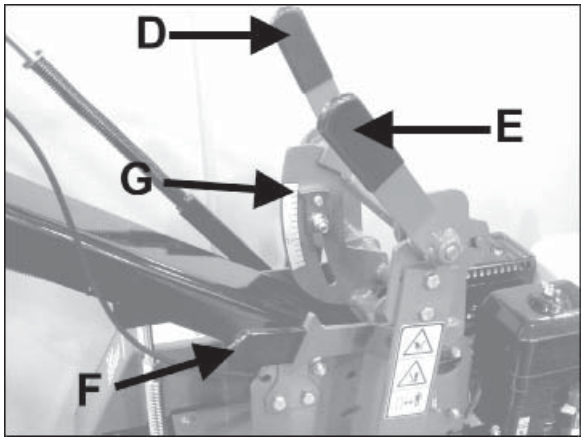
1. Make an initial depth setting. Park the machine on a hard surface. Loosen depth control locking lever E and lower depth control lever D until the blade rests on the surface.

2. Loosen the depth gauge lock E and set top of depth gauge G to the 3/4" (20mm) mark on the label. Tighten the depth gauge lock knob to secure the depth gauge setting.

3. Use your left hand to tip the machine forward while lowering the depth control lever D until the depth control crossbar hits the Depth Stop G. Tighten the locking lever E to lock in the depth setting, make a trial run in turf. Check the depth of cut.

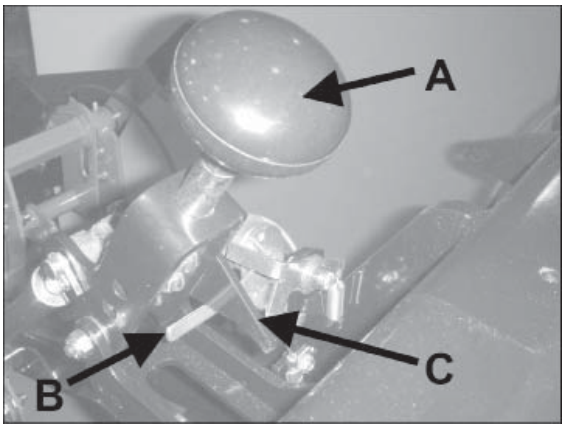
4. Re-adjust the depth gauge G and depth control lever D if necessary.

NOTE: Numbers on depth gauge do not necessarily represent thickness of sod being cut. The numbers are useful as a reference for making changes.



ADJUSTING OPERATOR PRESENCE CONTROL

1. To adjust operator presence cable, pull clutch control handle **A** rearward as far as possible.
2. Press operator presence handle (right handlebar) down as far as possible.
3. Adjust cable until the pivot arm **C** contacts the arm extending from the operator presence switch **B**.
4. Tighten cable clamp to secure cable. Check for proper operation.



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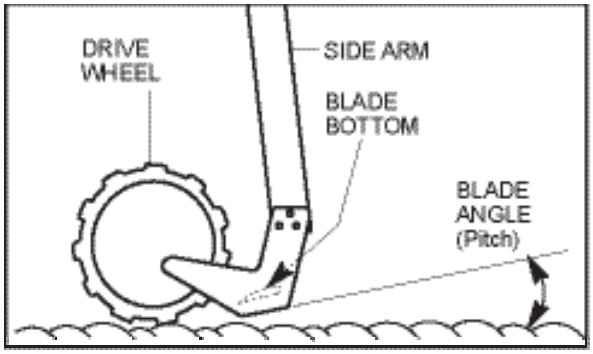
BLADE ANGLE (PITCH)

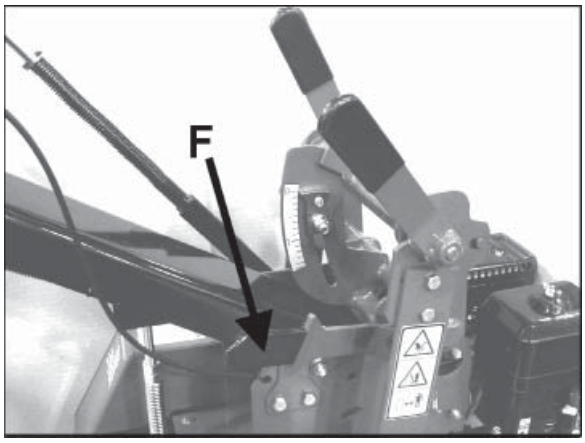
Under normal operating conditions, blade angle is minimal (blade bottom is flat). In extremely hard soil or when cutting with a dull blade, the blade may want to ride out of the ground. It may then help to adjust blade angle forward (see Adjusting Blade Angle below). A short trial run will indicate which is the best blade angle.

NOTE: Extreme blade angles put extra stress on the side arms. To reduce stress on the machine, operate with the flattest blade angle that gives satisfactory results.



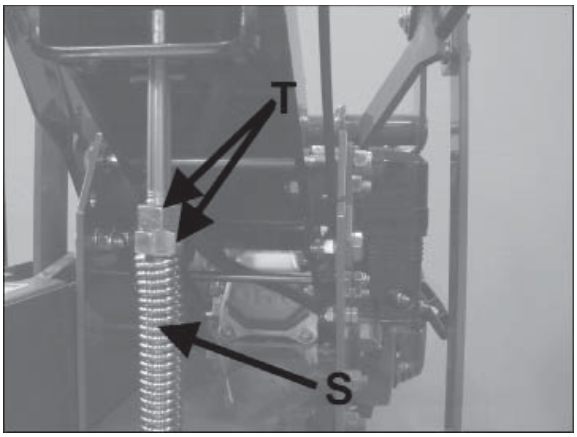
ADJUSTING BLADE ANGLE (PITCH)

1. Loosen blade angle control locking lever **F** and move H-frame forward or backward until blade is at desired angle (pitch).
2. Tighten blade angle control locking lever **F**.



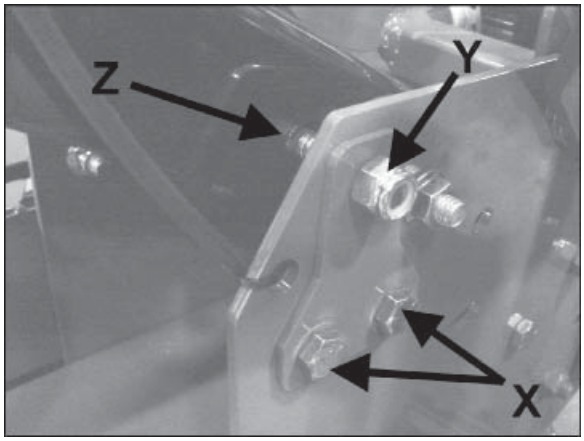
HANDLE SUPPORT SPRING

This spring **S** helps support the handle. If the four (4) isolator handle mounts are sagging or distorted, the two locking adjustment nuts **T** can be tightened downward to increase the spring force and raise the handle.



HANDLE STOP BOLTS

These two bolts **Y** limit the amount of handle movement. This prevents damage to the handle isolators, and provides positive control of the machine when extra effort is required to lift or turn. The rear stop bolt position is adjustable.. Loosen the two bolts **X** on the bolt centering plates on each side and tighten with the stop bolts centered in the two handle holes **Z**.



⚠WARNING

When replacement parts are required, use genuine **Schiller Grounds Care, Inc.** parts or parts with equivalent characteristics, including type, strength and material. Failure to do so may result in product malfunction and possible injury to the operator and/or bystanders.

Carbon monoxide present in the exhaust is an odorless and deadly gas. Never start or run the engine inside where exhaust fumes can collect. Provide enough fresh air to keep fumes from getting too strong.

Replace any warning decal that becomes illegible immediately.

DAILY MAINTENANCE

Operator Presence System

For the engine to run, the Operator Presence Lever must be held when the Master Clutch Control is engaged.

To Check:

1. Start the engine and run at 1/2 throttle with the master clutch disengaged.

2. Engage the master clutch holding the Operator Presence Lever. Release the operator presence lever and the engine should stop.

   Repair the machine before using if the Operator Presence System does not kill the engine.

Blades:

Check for damage. Replace any broken, cracked or otherwise damaged blades. Do not weld or straighten blades. Replace or sharpen dull blades. See sharpening instructions.

Hardware:

Tighten any nuts and bolts that are found loose. Replace any broken or missing cotter pins. Repair any other problems before operating.

Engine:

See engine manual for oil change intervals and oil specifications. See engine manual for air cleaner service intervals and service procedure.

Lubrication:

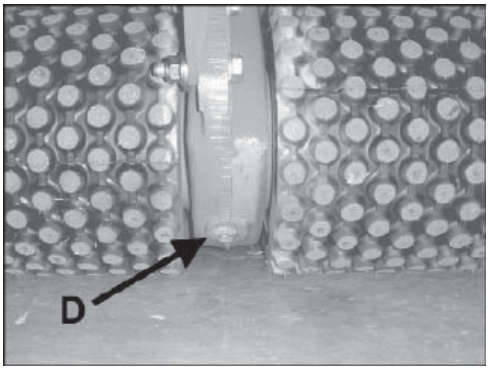
The gear case is initially filled with 3 1/2 pints (1.7 L) of EP 140 Gear Lube. Do not add to this amount unless oil is changed or lost through leakage. Gear case drain plug **D**.

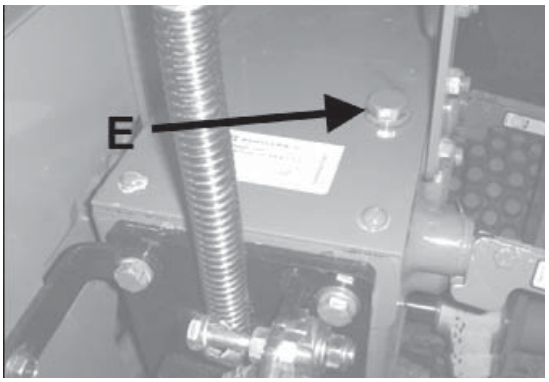
On all pressurized lubrication fittings use a good grade of Lithium Based lubricant.

The Jr. Sodcutter has 6 lubrication fittings. Lubricate pitman arms (1 each side) and side arms (1 each side) after every 4 hours of use.

Lubricate side arm pivots (1 each side - top of unit) after every 8 hours of use.

Check gear case lubricant level using dipstick **E** located on top of gear case. Check lube with dipstick sitting on threads, do not screw in.

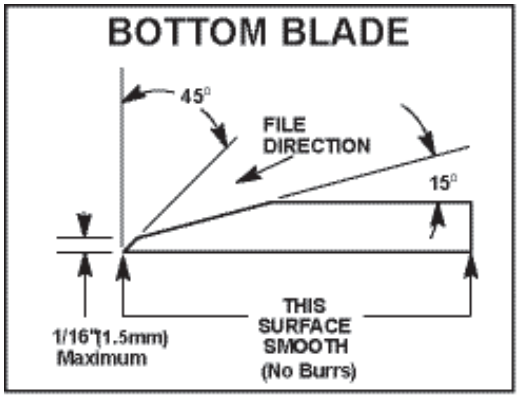


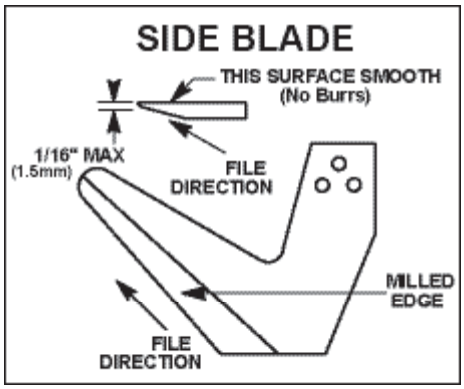


BLADE SHARPENING

Wear the appropriate personal protective equipment when sharpening blades.

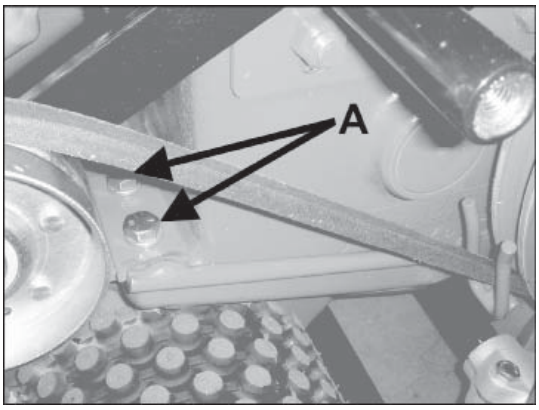
1. Hand file bottom blade at 45^{O} angle until no flat remains.
2. To keep cutting edge less than 1/16" (1.5mm) on 45^{O} angle, grind milled surface back at 15^{O} to less than 1/16"(1.5mm).
3. Hand file side blades at 45^{O} until no flat remains.
4. To keep cutting edge less than 1/16"(1.5mm) on 45^{O} angle, grind milled surface back at 15^{O} to less than 1/16"(1.5mm).

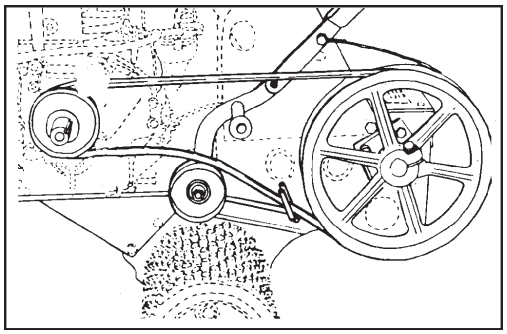




DRIVE BELT REPLACEMENT

1. Remove shield on left side of unit.
2. Remove nut securing brake band to clutch control rod.
3. Remove cotter pin on outside of guard support rod and move brake band over to nut on rod.
4. Loosen two bolts **A** securing belt guide to provide clearance when removing belt.
5. Remove belt from engine pulley. To do this, loosen upper and lower belt guards, or remove the engine pulley.
6. Install new belt in reverse procedure. Route the belt as shown.
7. Adjust belt and brake band. See Adjustment Section.





STORAGE INSTRUCTIONS

⚠ WARNING

To prevent possible explosion or ignition of vaporized fuel, do not store equipment with fuel in tank or carburetor in enclosure with open flame (for example, a furnace or water heater pilot light).

Daily Storage

1. Check engine oil level and air filter element daily.
2. Check oil level in gear case.
3. Close fuel valve at bottom of fuel tank.
4. Clean cutting blade (grass, dirt, etc.).

EXTENDED STORAGE

Before the equipment is put into storage for any period exceeding 30 days:

1. Drain all fuel from fuel tank and lines (use a hose or fuel line, routed from fuel tank shut-off to proper container).
2. Start engine and run until all fuel is used from the carburetor float bowl.
3. While engine is warm, drain the crankcase oil and refill with the proper weight of oil corresponding to the season when the equipment will next be used.
4. Remove the spark plug and squirt a small quantity of engine oil into the cylinder. Turn the engine over a few times to distribute the oil.
5. Lubricate all lubrication fittings.
6. Clean and oil cutting blade to prevent rust.

To put equipment into operation after an extended storage:

1. Fill fuel tank with clean fresh fuel.
2. Check crankcase oil level, and start engine.
3. Check fuel system for fuel leaks.

POSSIBLE PROBLEM	PROBABLE CAUSE	REMEDY
Blade will not stay in ground.	A. Bottom of blade is rounded off. B. Blade angle is not properly set.	A. Sharpen or replace blade. See page 15. B. Adjust blade angle. See page13.
Root hair pinning on side or bottom of blade.	A. Some types of turf and soil make this a problem.	A. Keep the blade extra sharp and ground back at a low angle.
Belt jumps off.	A. Wrong type of belt construction. B. Too much slack when belt tightener is disengaged.	A. Use only the special Ryan factory belt. B. Slide engine forward and readjust control rod.
Locking levers not tight when pulled to limit of travel.	A. Thread wear on locking nut. B. Locking nut not properly adjusted.	A. Replace locking nut. B. Tighten locking nut on opposite end of tie rod.
Belt grabs in pulleys and unit creeps when clutch is not engaged.	A. Belt is old and frayed, or is not the type sent out with the unit. B. Rust or paint in pulley grooves. C. Engine set too far forward.	A.Replacewithfactory construction belt, designed for belt tightener clutches. B. Clean and polish pulleys. C. Move engine back.
Idler does not engage belt when clutch lever is moved forward.	A. Brake band is not attached to clutch link or is broken.	A. Reattach upper end of brake band to clutch link or replace brake band.

Jr. Sodcutter

Models: 744844G.....Jr. Sodcutter - 12 in.(30.5cm)
744845G.....Jr. Sodcutter - 18 in.(45.7cm)

Engine

Model.....4 cycle 6.5H.P.(4.8KW) B&S Vanguard, Model 12H332, Type 0115, Trim B8, 12.5 cu. in. (205 cc)
Starter..... Recoil
Governor..... 3600 RPM ± 100 RPM, no load
Clutch..... spring loaded belt tightener type

Reduction

Engine to blade..... 2.94:1
Engine to drive wheels..... 55.8:1

Models: 744944C.....Jr. Sodcutter - 12 in.(30.5cm)
744945C.....Jr. Sodcutter - 18 in.(45.7cm0

Engine

Model..... 4 cycle 5.5 H.P. Honda Model GX160-K1QX2, GX160 OHV 9.9 cu. in. (163 cc)
Starter..... Recoil
Governor..... 3600 RPM ± 100 RPM, no load
Clutch..... spring loaded belt tightener type

Reduction

Engine to blade..... 2.94:1
Engine to drive wheels..... 55.8:1

Wheels:

Drive..... 8" (203 mm) Dia. w/knobby tread vulcanized to hub
Rear.....8 x 1.75 (203 X 45mm) semi-pneumatic tires with pre-packed ball bearings

Drive:

Engine to gear case..... "A" section belt
Gear case to drive shaft and blade drive.....roller chain

Gear case:

Lubrication..... EP140 Gear lube
Capacity..... 3 1/2 Pints (1.7L)

Cutting width:

744844G & 744944C.....11 3/4" (298 mm)
744845G & 744945C.....18" (457 mm)

Cutting depth:.....up to 1.5" (38mm)

Blade pitch:

Hand lever adjustment..... variable 0^{O} to 9^{O}

Blade speed: .....
1225 oscillations/min. @ 3600 engine RPM

Dimensions:

Width..... 24" (600 mm)
Length..... 49" (1244 mm)
Height..... 33" (838 mm)
Wheelbase..... 19" (483 mm)

Weight:

744844G & 744944C..... 305 lbs. (138 Kg)
744845G & 744945C..... 350 lbs. (159 Kg)

TOUCH -UP PAINT:
16OZ. (0.5L) Spray can, order P/N 65334

EC Declaration of Conformity

4164673 REV A

The Undersigned Manufacturer:

Schiller Grounds Care, Inc.
One Bob-Cat Lane
Johnson Creek, WI 53038

Chuck Clark
Director of Operations
Date: February 1, 2010

EU Authorized Representative:

Earlsmere Limited
Unit 18 Valley Road
Station Road Industrial Estate
Wombwell, Barnsley, South Yorkshire, S73 OBS UK

Jim White
Managing Director
Date: February 1, 2010

Declare that the machine Described Below:

Make & Type: ..... **Ryan, Jr. Sodcutter**
Category:..... **Sodcutter**
Series: **744844G, 744845G**
Engine: ..... **Briggs & Stratton**
Type:..... **12H3320144B8**
Speed:..... **3600 R.P.M**
Net Installed Power: ..... **4.8 KW (6.5hp)**
Operation Width: ..... **30.2 mm (11.75”) for 744844G**
..... **45.7 mm (18”) for 744845G**

Complies with the provisions of the following European Directive, Amendments, and the Regulations transposing it into national law:

Directives/Harmonized Standards

Machinery Directive..... .....**2006/42/EC**
EMC Directive: **2004/108/EC**
Noise in the Environment Directive **2000/14/EC**
Vibration Directive **2002/44/EC**
Non Road Emissions..... .....**2002/88EC**

Sound: Sound levels were determined in accordance with Directives 2000/14/EC, 2006/42/EC and standard ISO 11094

Guaranteed Sound Power Level **105dB**
Operator Ear..... **90dB**

Vibration:

Hand/arm vibration was measured at the right and left operator handles per ISO 5349-1-2001 and ISO 5349-2-2001. Levels were calculated using ISO/DIS 5395-1, in accordance with 2002/44/EC. Only the highest of the left and right readings is given.

Guaranteed Vibration Level..... **9 m/s²**

Intended Use:

This machine is for cutting sod in grass areas grown for the purpose of harvesting sod, and general sod removal. It is intended for use on flat areas and small slopes. Loss of control may result on steeper slopes. It is not intended for use in rocky areas.

EC Declaration of Conformity

4164674 REV A

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Wombwell, Barnsley, South Yorkshire, S73 OBS UK

Jim White
Managing Director
Date: February 1, 2010

Declare that the machine Described Below:

Make & Type: ..... **Ryan, Jr. Sodcutter**
Category:..... **Sodcutter**
Series: **744944C, 744945C**
Engine: ..... **Honda**
Type:..... **GX160-K1QX2**
Speed: ..... **3600 R.P.M**
Net Installed Power: ..... **3.6 KW (5.5hp)**
Operation Width: ..... **30.2 mm (11.75") for 744944C**
..... **45.7 mm (18") for 744945C**

Complies with the provisions of the following European Directive, Amendments, and the Regulations transposing it into national law:

Directives/Harmonized Standards

Machinery Directive..... .....**2006/42/EC**
EMC Directive: **2004/108/EC**
Noise in the Environment Directive **2000/14/EC**
Vibration Directive **2002/44/EC**
Non Road Emissions..... .....**2002/88EC**

Sound: Sound levels were determined in accordance with Directives 2000/14/EC, 2006/42/EC and standard ISO 11094

Guaranteed Sound Power Level **103dB**
Operator Ear..... **88dB**

Vibration:

Hand/arm vibration was measured at the right and left operator handles per ISO 5349-1-2001 and ISO 5349-2-2001. Levels were calculated using ISO/DIS 5395-1, in accordance with 2002/44/EC. Only the highest of the left and right readings is given.

Guaranteed Vibration Level..... **9 m/s²**

Intended Use:

This machine is for cutting sod in grass areas grown for the purpose of harvesting sod, and general sod removal. It is intended for use on flat areas and small slopes. Loss of control may result on steeper slopes. It is not intended for use in rocky areas.